296 /380 cont./
179 spread among the Chiriguano recently for it has not yet spread
171 throughout the territory they inhabit. The Chiriguano who live far removed from the half-breed or Indian populations of the Cordillera are not "coqueros," and only rarely does one meet among them some old man who accepts a quid of coca.

296 Ivu is the last point toward the east and north where I
171 could distribute my supply of coca to advantage. Nordenskiöld
302 (10, pp. 85-91) sought to demonstrate that the custom of
114 blackening the teeth went along cheek by jowl with that of chewing coca and derived from it. As a matter of fact, this habit has a very marked western distribution and follows the zone of coca cultivation.

296 The Chiriguano mix each quid of coca with the ashes
[824] reaped from a tree (ulala) whose scientific name I do not know. These ashes (tanimbo), which corresponds to the llicta of the Quichua, are contained in a small leather bag.

296 Coca is a luxury commodity which the Quichua Indians
439 or half-breeds come to sell to the Chiriguano. To avoid all
● 804 argument and all fraud on the part of unscrupulous sellers, the Chiriguano have recourse to balances of their own making. They fabricate them with /381/ two calabashes cut in half to serve as scales (Figs. 54 and 55). The balance with scales was in
[199] use in pre-Hispanic times /Fig. 54 appears here/ in the ancient Inca Empire (see Nordenskiöld, 16) and so I believed at first that among the Chiriguano it represented a survival of /Fig. 55 appears here/ the Andean influence, whose importance we shall see further on. Among the Chiriguano, however, this object is designated by the Spanish name /382/ mbalanza, which seems to indicate that they borrowed it from the half-breeds. The latter and the Quichua use them in their commercial transactions, but especially for weighing the precious coca. Perhaps it was the same in prehistoric times. There is nothing to prove that only metals were weighed, as has been supposed with respect to these ancient scales.

804 For weights the Chiriguano use old Bolivian silver coins
177 and express measures according to the old Spanish system. By a tacit convention a coin worth two modern sous is the equivalent of one ounce.

1: Métraux--148 E-5 (1929) 1930 SF10 Chiriguano SF10
Modern Quechua SE24
Q
804
405

Fig. 54. Balance with scales in use among the Quichua half-breeds of the Tarija region. Prov.: Narvaez River. (1/5 nat. size.)

C
804
405

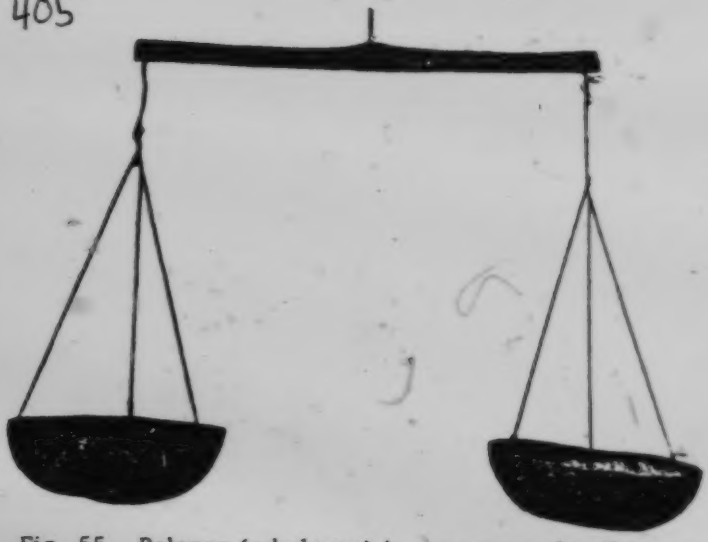

Fig. 55. Balance (mbalanza) in use among the Chiriguano for weighing coca. Prov.: Saladito (upper Pilcomayo).

/382 cont./

804 439 [177] The Chiriguano measure the cloth which Syrian peddlers come to offer them with varas, that is, a stick about 80 centimeters long, the length of the ancient Spanish vara. This instrument has been borrowed from the Bolivian half-breeds.

Chapter VI

121 ## Art among the Chiriguano and Chané Indians

To Professor Félix F. Outes.

The artistic sense of the Chiriguano is manifested in pottery decoration, pyrography, and wood carving.

We shall study these three activities one after the other.

Pottery Technique

114 323 The Chiriguano pottery technique has been studied briefly by Campana (p. 54), following Father Giannechini's notes, and by Outes (3, pp. 122-123), who adds some details communicated to him by the naturalist Holmberg to the ones he took from Campana's work. Nordenskiöld (1 and 10, pp. 142-147) completed on many points Campana's brief survey, so that I myself shall have few new things to note.

317 323 [439] The clay used by Chiriguano potters comes from beds well known to the Indians, where they go from time to time to lay in fresh supplies. It is enough to see old vessels full of earth around a hut to know that a woman lives there still practicing the ancestral industry. Where adequate clay is lacking, pottery is imported. Thus in the Tigüipa mission all the vessels in use were made in Macharetí.

323 In order to be used the clay must be degreased with powder /383/ coming from potsherds. Fragments of old vessels are ground in a mortar until after being put through a sieve, they give a fine powder which is kneaded for a rather

/230 cont./

304 881 [304] Then the one doing the operation looks among his implements for the string with which he takes the exact measurements so that the hole will be in the middle and above the chin. Then he prepares the Guasupirasa, which literally means: 304 413 881 [114] piercer of the cured skin of pygmy deer. Certain writers have believed that the guasupirasa is a pygmy-deer horn on the basis of the name guasu, with which the name of the article begins, but it is a mistake. The guasupirasa is a round piece of iron of the size of a costalera needle, which they call Yargüi in Quichua /Quechua/ (2).

> 2. If it were a slender deer-horn, it would be liable to break, and if it were slightly sharpened the hole would be very large and it would be difficult to hold the first tembeta, which should be small. There would be many other problems, which are avoided with the slender and strong iron.

304 881 As I have said, he takes the appropriate measurements with a string; he puts his hand on his guasupirasa, and upon seeing this the mother is frightened and weeps in silence, and the other people shrink back. Finally, utilizing the services of another practitioner, he has him press very strongly with the index fingers of both hands at the edges of the temples, at the point where the ears are attached, and when he is sure /231/ that the boy keenly feels the pain that the assistant's fingers cause in his ears he quickly and deftly inserts the well-sharpened iron, and the hole is made with considerable skill, the Guasupirasa passing up to the tip of the nose.

He at once puts a hollow little tube of tin on the iron and lowers it little by little in order to pull it out of the pierced lip, where instead there remains in place the little tube, which sticks out a little on both sides of the lip. In [301] Chiriguano this tube is called Tembetandi, or white tembeta.

/192 cont./

On the Rio Pilcomayo three pins were used on each side. The distance between the pins of the opponent was three ells. Each pin consisted of a shelled ear of maize, and the distance between them was supposed to be a hand span (1). The balls

1. Longest distance between thumb and little finger.

used are made of fired clay and are hollow, with small, rattling pellets inside (Fig. 99). /Plate 17 appears here./

Fig. 95.
Little sticks for the tshócareta game. 2/9.

/193/ The Life of the Indian Children

If one speaks of the life in the villages, one must not forget the children. The children play, but also help the adults. They are reared like the Choroti and Ashluslay children. They spend their lives in happy freedom, without thrashings and harsh words.

The Chiriguano and Chané children have a number of games and toys which one never sees the children of the whites in Bolivia use, and all of which seem to me to be genuinely Indian.

First of all, the Indian children play the games of the adults that I have already mentioned. Of the Choroti and Ashluslay games, they are familiar with the hockey-like game of ball, which the Chiriguano call "tâca." I did not see it played among the Chané. As goals they use pits, and sometimes they hit the

[text continues on p. 47] ball with rackets.